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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

DRAWING TRANSMITTAL

In re Application of: Rodolfo Padua et al For: Electrically Responsive Promoter System

Group Art No.: 3762 Filed: December 20, 2001

SN: 10/027,655

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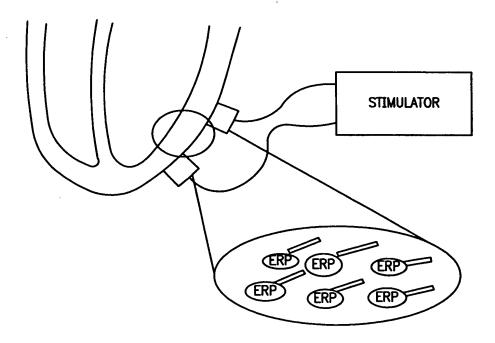


FIG. I

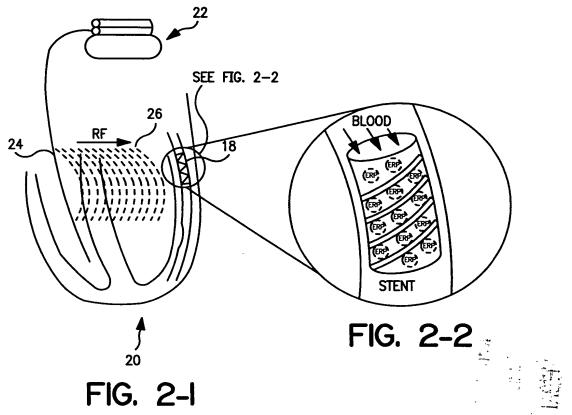


FIG. 2-I

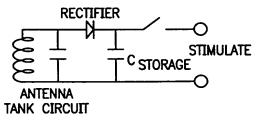


FIG. 2A

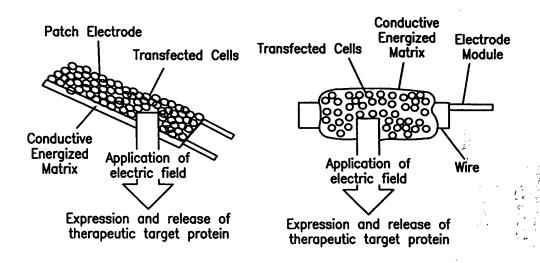
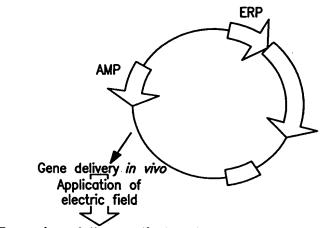


FIG. 3



Expression of therapeutic target

FIG. 4

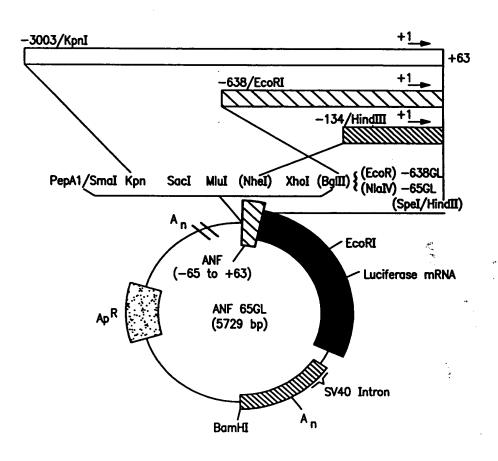
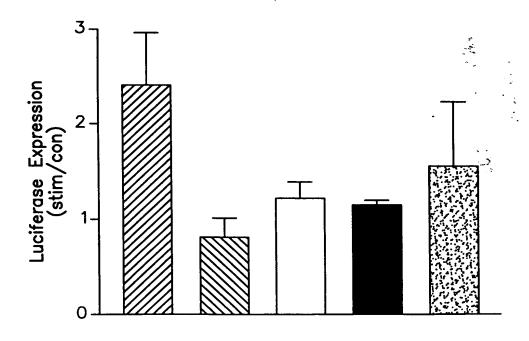


FIG. 5

10Hz, 20ms, 1mA, 1.3s polarity reversal 10Hz, 10ms, 4mA, 6.0s polarity reversal 10Hz, 20ms, 1mA, 6.0s polarity reversal 5Hz, 5ms, 2mA, AC coupled 10Hz, 20ms, 1mA, AC coupled



Stimulus Parameters Tested

FIG. 6

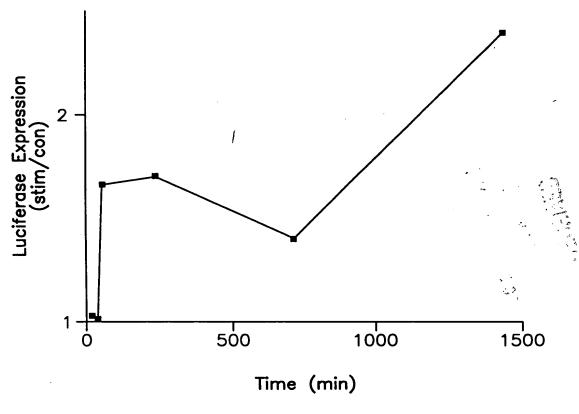


FIG. 7

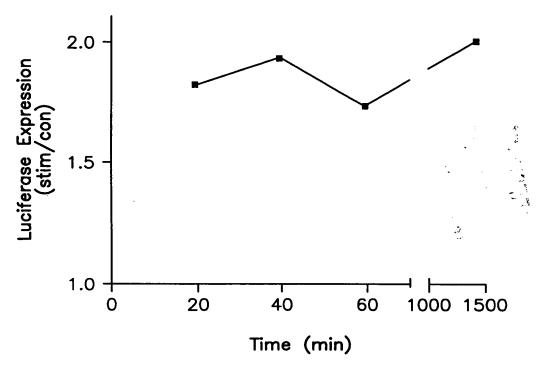


FIG. 8

Electrically Responsive Promoter Stimulation Apparatus

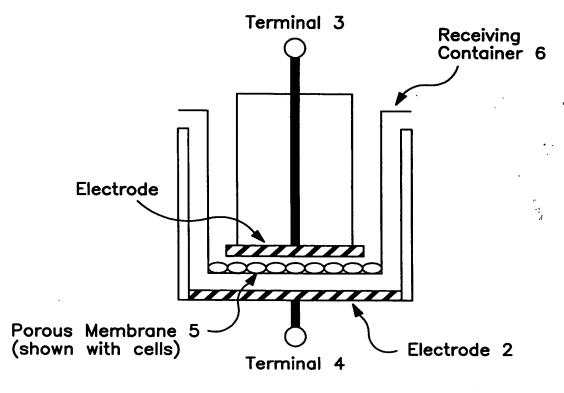


FIG. 9

Electrical Stimulation

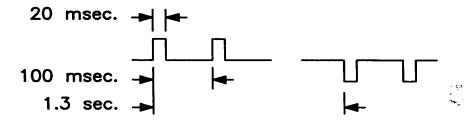


FIG. 10

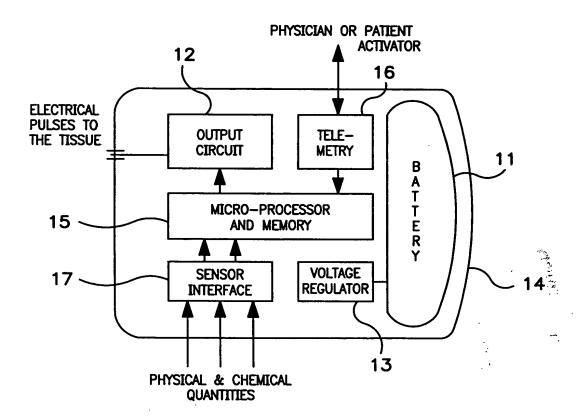
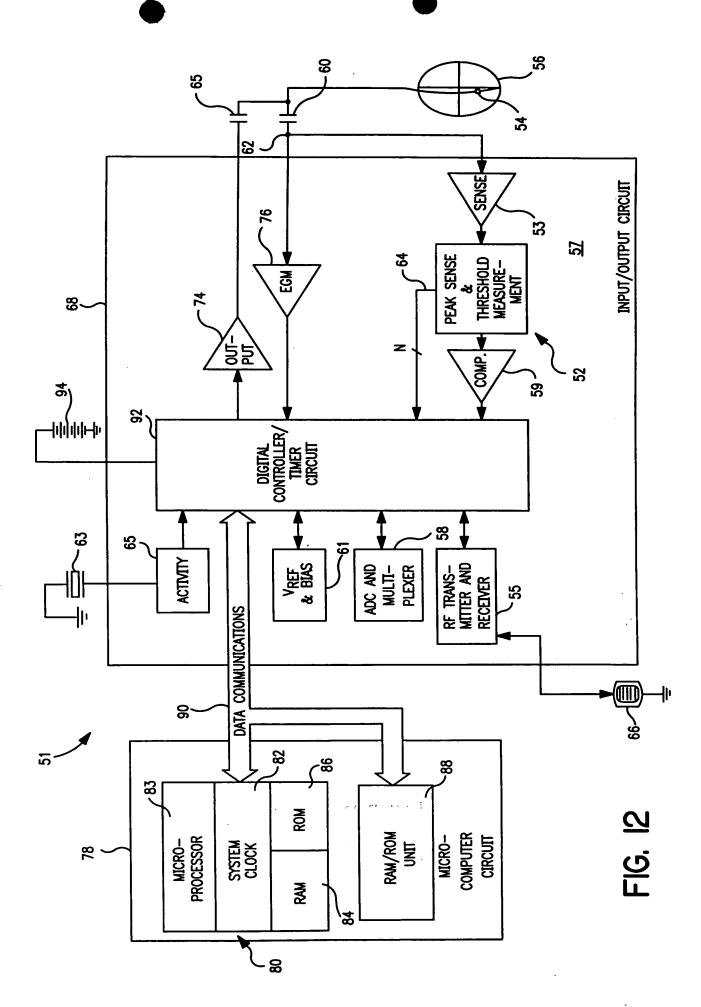


FIG. 11



200

No.

Simplified Schematic of the Output Circuit of A Stimulator

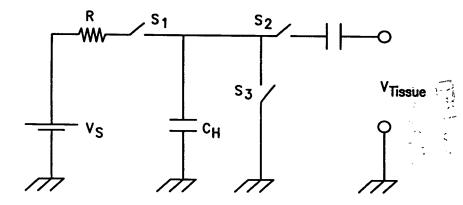


FIG. 13

Equivalent Circuit of the Output Stage During Stimulation

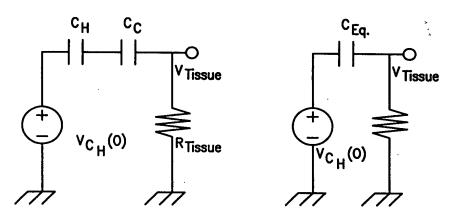


FIG. 14

Timing of the Internal Signals and the Tissue Stimulation Signal

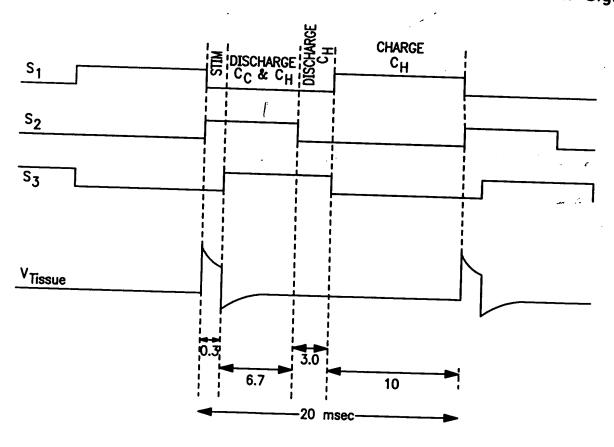


FIG. 15